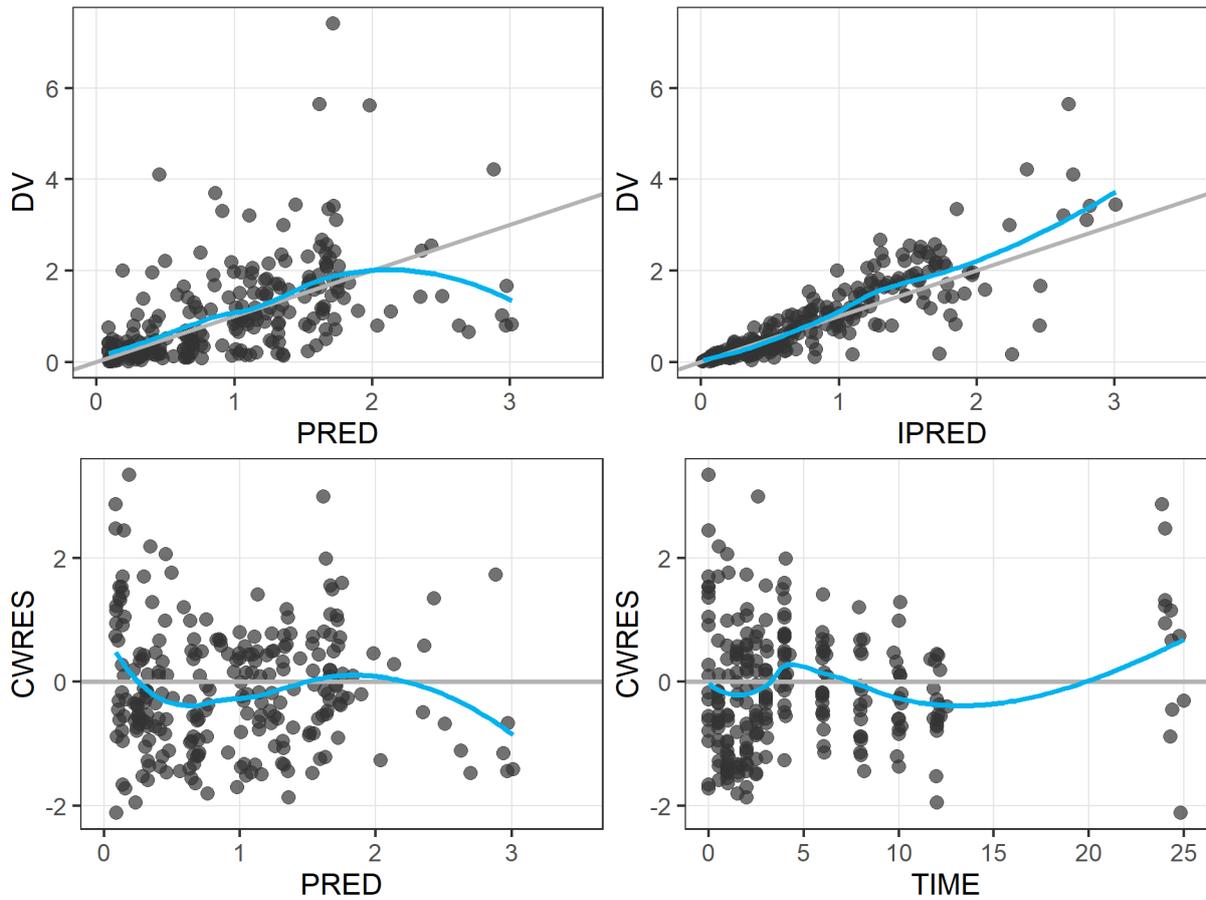


1
2
3

FIG S1 Population pharmacokinetic model for prothionamide (PTO).

4



5

6 **FIG S2** Goodness of fit (GOF) plots for final population pharmacokinetics model for
7 prothionamide (PTO). (Upper left panel: Observed concentrations versus(vs.)
8 population predicted PTO concentrations, Upper right panel: Observed concentrations
9 vs. individual predicted PTO concentrations, Lower left panel: Conditional weighted
10 residual vs. population predicted PTO concentrations, Lower right panel: Conditional
11 weighted residual vs. time; Grey line represents the lines of identity or unity; the blue
12 line represents the smooth of the data)

13 **TABLE S1. Comparisons of pharmacokinetics target parameters among weight-band (WB) and fixed dosing regimens for**
 14 **prothionamide**

| Schedule | | BID Schedule | | | | | | |
|--------------------------------|---------------------|----------------------|----------------------|-----------------------|-----------------------|----------------------|-------------------|----------------------|
| Regimen | Weight-band (WB) | Fixed | Ratio | Weight-band (WB) | Fixed | Ratio | | |
| Dose | 250mg for 40~50kg | 250mg for 40~67kg | Fixed 250mg/WB 250mg | 375mg for 50~67kg | 375mg for 40~67kg | Fixed 375mg/WB 375mg | WB 375mg/WB 250mg | Fixed 375mg/WB 250mg |
| C_2 (5th ~ 95th) | 1.56 (0.52~4.69) | 1.54 (0.58~3.74) | 0.99 | 2.03 (0.81~5.34) | 2.19 (1.03~5.68) | 1.08 | 1.31 | 1.41 |
| C_6 (5th ~ 95th) | 0.94 (0.20~3.04) | 0.78 (0.16~2.96) | 0.83 | 1.20 (0.14~3.72) | 1.18 (0.20~3.85) | 0.98 | 1.29 | 1.26 |
| C_{max} (5th ~ 95th) | 1.88 (0.74~4.69) | 1.68 (0.72~4.00) | 0.89 | 2.54 (1.08~5.99) | 2.68 (1.23~6.18) | 1.06 | 1.35 | 1.43 |
| C_{min} (5th ~ 95th) | 0.47 (0.06~2.34) | 0.40 (0.05~2.23) | 0.85 | 0.53 (0.05~2.62) | 0.58 (0.10~2.81) | 1.09 | 1.14 | 1.24 |
| AUC_{ss-tau} (5th ~ 95th) | 11.7 (3.98~35.2) | 9.78 (3.53~34.2) | 0.84 | 14.27 (4.21~41.58) | 15.69 (5.53~44.83) | 1.10 | 1.22 | 1.34 |
| AUC_{ss-24} (5th ~ 95th) | 23.4 (7.95~70.3) | 19.56 (7.07~67.4) | 0.84 | 28.5 (8.42~83.2) | 30.74 (10.9~86.3) | 1.07 | 1.21 | 1.31 |

| Schedule | | | QD Schedule | | | | | |
|---------------------------------------|----------------------|----------------------|----------------------|-----------------------|----------------------|----------------------|-------------------|----------------------|
| Regimen | Weight-band (WB) | Fixed | Ratio | Weight-band (WB) | Fixed | Ratio | Ratio | Ratio |
| Dose | 500mg for 40~50kg | 500mg for 40~67kg | Fixed 500mg/WB 500mg | 750mg for 50~67kg | 750mg for 40~67kg | Fixed 750mg/WB 750mg | WB 750mg/WB 500mg | Fixed 750mg/WB 500mg |
| C ₂ (5th ~ 95th) | 0.48 (0.05~2.48) | 0.47 (0.03~2.13) | 0.99 | 0.56 (0.05~3.39) | 0.65 (0.08~3.02) | 1.15 | 1.18 | 1.36 |
| C ₆ (5th ~ 95th) | 0.41 (0.04~2.39) | 0.40 (0.03~1.85) | 0.97 | 0.47 (0.05~2.90) | 0.50 (0.08~2.75) | 1.07 | 1.15 | 1.23 |
| C _{max} (5th ~ 95th) | 3.43 (1.40~8.15) | 3.36 (1.37~7.64) | 0.98 | 4.54 (2.03~10.7) | 4.45 (2.21~10.51) | 0.98 | 1.32 | 1.30 |
| C _{min} (5th ~ 95th) | 0.35 (0.03~2.31) | 0.34 (0.03~1.64) | 0.97 | 0.38 (0.04~2.60) | 0.43 (0.07~2.46) | 1.13 | 1.07 | 1.22 |
| AUC _{ss-tau} (5th ~ 95th) | 23.25 (7.29~73.7) | 22.35 (7.34~65.7) | 0.96 | 28.66 (10.2~103.2) | 29.5 (9.87~94.0) | 1.03 | 1.23 | 1.27 |

15 C₂: Plasma concentration(ug/mL) at 2 hours after dose, C₆: plasma concentration(ug/mL) at 6 hours after dose, C_{max}: peak
16 concentrations, C_{min}: trough concentrations, AUC_{ss-tau}: Area under the plasma concentration at steady state in dosing interval, AUC_{ss-}
17 ₂₄: Area under the plasma concentration at steady state for 24 hours.